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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/785,338	02/24/2004	Young-Ju Kang	45545.23.1	8783
22859 7590 07/01/2008 INTELLECTUAL PROPERTY GROUP FREDRIKSON & BYRON, P.A. 200 SOUTH SIXTH STREET SUITE 4000 MINNEAPOLIS, MN 55402				
EXAMINER				
TALBOT, BRIAN K				
ART UNIT		PAPER NUMBER		
1792				
MAIL DATE		DELIVERY MODE		
07/01/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/785,338

**Applicant(s)**

KANG ET AL.

**Examiner**

Brian K. Talbot

**Art Unit**

1792

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 18-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/88)  
Paper No(s)/Mail Date 2/24/04 and 3/28/05
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

1. Applicant's election without traverse of Group I, claims 1-17, in the reply filed on 3/19/08 is acknowledged.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 5,7,11,14 and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 5,11,14 and 17, the phrase "capable" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Regarding claim 7, the term "with" between "tube" and "introducing" appears to be a typographical error. The term should be "while". Clarification is requested.

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 7 and 10-17 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. Process steps for forming the optical fiber preform by a MCVD process is not disclosed and is critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976).

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1,2,5 and 7-11 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Tankala (6,578,387).

Tankala (6,578,387) teaches a method of fabrication of rare earth doped performs for optical fibers. Tankala (6,578,387) teaches a silica soot deposited as a layer on the inside surface of a silica-based tube by MCVD. The silica soot is immersed in a rare earth solution for doping and then treated with a chlorine gas in an inert atmosphere at elevated temperatures (abstract). The chlorine/inert gas treatment is performed at 600°C-1200°C to dry the silica soot, i.e. remove water (dehydrate) (col. 2, lines 55-65). A sintering step of 1800°C-2000°C is performed. A flame unit is utilized to form the soot with a moving torch (see Figs. 1-4).

Claims 1,2,4,5,7-11,16 and 17 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Sen (6,889,528).

Sen (6,889,528) teaches a silica soot deposited as a layer on the inside surface of a silica-based tube by MCVD. The silica soot is immersed in a rare earth solution for doping and then treated with a chlorine gas in an inert atmosphere at elevated temperatures (abstract). The chlorine/inert gas treatment is performed at 600°C-1200°C to dry the silica soot, i.e. remove water (dehydrate). A sintering step of 1800°C-2000°C is performed. A flame unit is utilized to form the soot with a moving torch. A lathe is utilized in the manufacturing process (col. 1, line 23 – col. 6, line 25).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3,6,12 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tankala (6,578,387) in combination with Walczak (2003/0221459).

Features detailed above concerning Tankala (6,578,387) are incorporated here.

Tankala (6,578,387) fails to teach that the chlorine drying gas is preheated prior to entering the tube.

Walczak (2003/0221459) teaches a forming a optical waveguide fiber perform whereby a silica soot is applied to the innerside of a silica tube and dried with a chlorine gas. The chlorine gas may be heated prior to entering the furnace.

Therefore it would have been obvious for one skilled in the art at the time the invention was made to have modified Tankala (6,578,387) process by preheating the chlorine/inert drying gas prior to entering the tube as evidenced by Walczak (2003/0221459) with the expectation of achieving a more efficient drying process.

Regarding claims 6,12 and 15 the claims recite a heatproof plate to protect instruments from being heated. While the Examiner acknowledges the fact that the prior art is silent with respect to this limitation, it is the Examiner's position that it would have been within the skill of

one practicing in the art to utilize a heatproof plate if so desired for the advantages associated with its use, i.e. protecting sensitive components.

Claims 4,6,12,15,16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tankala (6,578,387) in combination with Sen (6,889,528).

Features detailed above concerning Tankala (6,578,387) are incorporated here.

Tankala (6,578,387) fails to teach using a lathe.

Sen (6,889,528) teaches using a lathe as detailed above.

Therefore it would have been obvious for one skilled in the art at the time the invention was made to have modified Tankala (6,578,387) process by utilizing a lathe as evidenced by Sen (6,889,528) with the expectation of achieving similar success.

Regarding claims 6,12 and 15 the claims recite a heatproof plate to protect instruments from being heated. While the Examiner acknowledges the fact that the prior art is silent with respect to this limitation, it is the Examiner's position that it would have been within the skill of one practicing in the art to utilize a heatproof plate if so desired for the advantages associated with its use, i.e. protecting sensitive components.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian K. Talbot whose telephone number is (571) 272-1428. The examiner can normally be reached on Monday-Friday 8AM-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy H. Meeks can be reached on (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Brian K Talbot/  
Primary Examiner, Art Unit 1792

BKT